

Title (en)
ESTABLISHING A DEVICE-TO-DEVICE COMMUNICATION SESSION

Title (de)
HERSTELLUNG EINER VORRICHTUNG-ZU-VORRICHTUNG-KOMMUNIKATIONSSITZUNG

Title (fr)
ÉTABLISSEMENT D'UNE SESSION DE COMMUNICATION DE DISPOSITIF À DISPOSITIF

Publication
EP 3079391 A1 20161012 (EN)

Application
EP 16166959 A 20130829

Previously filed application
PCT/EP2013/067904 20130829 WO

Priority

- EP 12183256 A 20120906
- EP 13756127 A 20130829
- EP 16166959 A 20130829

Abstract (en)

Legacy technologies show the problem that when establishing a secured device-to-device [D2D] communication a playback attack can easily succeed. Method (100) for establishing a device-to-device communication session between mobile devices (MD1, MD2) which are mutually connectable via a D2D communication channel (DDC) and individually connectable to a mobile network (MN), comprising: - preloading (120) an initiation key on each of the mobile devices (MD1, MD2), the initiation key being associated with a validity period; and on each of the mobile devices (MD1, MD2): - verifying (140) a validity of the initiation key based on a current time; - if the initiation key is deemed valid, generating (160) a session key using the initiation key by using the initiation key in performing (164, 166) a key agreement procedure between the mobile devices (MD1, MD2) over the D2D communication channel (DDC), the key agreement procedure resulting in the session key if the initiation key used by each of the mobile devices matches; and - establishing (180) the D2D communication session over the D2D communication channel (DDC) based on the session key.

IPC 8 full level
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CPC (source: CN EP KR US)
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Citation (search report)

- [A] WO 2011117677 A1 20110929 - NOKIA CORP [FI], et al
- [A] WO 2010030515 A2 20100318 - QUALCOMM INC [US], et al
- [A] US 2007253376 A1 20071101 - BONTA JEFFREY D [US], et al
- [A] GÅ BOR FODOR ET AL: "Design aspects of network assisted device-to-device communications", IEEE COMMUNICATIONS MAGAZINE, IEEE SERVICE CENTER, PISCATAWAY, US, vol. 50, no. 3, 1 March 2012 (2012-03-01), pages 170 - 177, XP011429640, ISSN: 0163-6804, DOI: 10.1109/MCOM.2012.6163598

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